

**IN-DEPTH ANALYSIS AND DISSEMINATION OF DATA FROM  
THE SITUATION ANALYSIS STUDY IN CEARA STATE, BRAZIL**

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## **Executive Summary**

In 1993, a Situation Analysis of Reproductive Health Resources was conducted in the state of Ceará. With the financial support of USAID, the Situation Analysis (SA) was implemented by *Viva Mulher* with technical assistance provided by the Population Council. The primary objective of the 1993 study was to provide baseline information on the availability and quality of family planning and other reproductive health services throughout the state.

In total, 268 service delivery points (SDPs) were evaluated in areas related to service accessibility, provider training, the availability of equipment, contraceptive stocks and other consumable supplies, the adequacy of the information exchanged between providers and clients, and client perceptions of service quality. The survey found that while 77 percent of SDPs offered pre-natal care and 57 percent provided gynecological services, only one-third offered family planning services, and even among those SDPs offering family planning, a mere 17 percent had sufficient contraceptive stocks on hand. Serious deficiencies were evident in all three types of reproductive health services, an expected finding given the fact that one-third of all client visits lasted five minutes or less.

Since 1993, numerous interventions have been carried out in Ceará aimed at increasing the availability and quality of family planning and other reproductive health services in the public sector. A second round of Situation Analysis, initiated in September of 1997, will measure the cumulative impact of these activities. While the 1993 SA uncovered deficiencies in most areas, from contraceptive stockouts and equipment deficits to limited interaction between providers and clients and poor SDP supervision, it is anticipated that the 1997 SA will find improvements in most areas as well as highlight the remaining areas of greatest need.

## **I. Introduction**

### ***Background***

Due to both political and religious factors, Brazil has never had an official family planning program. Couples wishing to space or limit births have had limited options, often seeking family planning services in private clinics or purchasing oral contraceptives in pharmacies. Since the 1980s, post-partum sterilization has been performed in both the public and private sectors, although the government only recently approved it as a family planning method (August 1997). Over the past decade, official support of family planning has increased, and some state governments have launched reproductive health programs that include contraceptive services. *Viva Mulher* is a program of the State Health Secretariat of Ceará (SESA), which has been struggling to rescue family planning from its marginalized position and incorporate it into the range of services typically offered as reproductive health care.

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### ***Recent Change***

Since 1993, SESA and various USAID Cooperating Agencies have worked together to expand the scope of women's health services to include family planning, while increasing the coverage of already existing services. Recent efforts include the distribution of equipment and consumable materials necessary for providing gynecological services in each of Ceará's 184 municipalities (such as gynecological exam tables, speculums, tenaculums, and microscopes), together with educational materials on pre- and post-natal care, STD awareness, and contraceptive alternatives. During the last four years, *Viva Mulher* has provided integrated reproductive health training to a total of 1,649 doctors and nurses and 2,582 medical technicians with the aim of strengthening multi-disciplinary teams at the municipal level. The state government of Ceará has also begun distributing contraceptives free of charge through the *Viva Mulher* program. And in 1996, the Brazilian Ministry of Health, in coordination with the Women's Health Division, published and distributed norms for providing a wide range of family planning services.

## **II. Objectives**

The data presented in this report provide baseline information on the state of reproductive health services in Ceará in 1993. The principal objective of this analysis was to facilitate SESA's use of reproductive health data by providing a detailed description of the accessibility and quality of family planning and other reproductive health services to be compared with results from a second round of Situation Analysis initiated in September of 1997.

The present report is an expanded form of an earlier version that was limited to an analysis of inventory data. The current version incorporates findings from provider interviews as well as observations of service delivery, which were presented at *Viva Mulher's* August 1997 seminar, officially launching Situation Analysis II: An Impact Evaluation.

## **III. Methodology**

In the 1993 Situation Analysis (SA), SDPs were drawn from the 23 municipalities randomly selected for the 1991-92 Demographic and Health Survey *Pesquisa Sobre Saúde*

*Familiar no Nordeste do Brasil.* Within these municipalities, the sampling frame was limited to SDPs providing services free of charge, which included all public facilities as well as private sector facilities receiving public subsidies to provide free services.

Due to the large number of SDPs in the Fortaleza metropolitan area, SDPs were included in the sampling frame only if they offered, or could potentially offer,<sup>1</sup> ambulatory reproductive health services and had performed more than 1,500 medical consultations during the reference month of May 1993; or, if they specialized in providing reproductive health services.<sup>2</sup> In the interior of the state (19 of the 23 municipalities selected), all SDPs that provided, or could potentially provide, ambulatory reproductive health services were surveyed, excluding facilities providing specialty care in an unrelated area (e.g., psychiatric hospitals).

Field work was carried out by a research team trained in the collection of inventory data, clinical observation, and structured interviews. Each SDP was visited by at least two fieldworkers who observed a complete day of service delivery, interviewed observed providers and clients, and conducted a clinic inventory, the latter consisting of questions addressed to the SDP director (or other appropriate personnel) as well as direct observation of stocks and storage conditions. In total, 268 SDPs were surveyed, 74 in the Fortaleza metropolitan area and 194 in the interior of Ceará.

#### **IV. Results: Inventory Module**

##### ***SDP Readiness to Deliver Family Planning and Gynecological Services***

Results presented in this section are based on data collected with the inventory instrument *Inventario dos Recursos Disponíveis das Unidades e Provedoras de Serviços de Saúde Reprodutiva*. In consideration of the information needs of different decision makers, results will be displayed by geographical region (Fortaleza metropolitan area and the interior), by level of SDP (hospital, health center, and health post),<sup>3</sup> and by the provision of

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<sup>1</sup> SDPs that could *potentially* offer reproductive health services refers to those where it would be appropriate to offer RH care, but where such services were not yet available (e.g., general hospitals, ambulatory clinics).

<sup>2</sup> An SDP specializing in reproductive health provided at least one of the following: family planning services, gynecological examinations, cancer prevention services, pre-natal care, obstetric services, or post-partum care.

<sup>3</sup> All facilities with beds have been included in the hospital category, including *maternidades*, *unidades mistas de saúde*, and *casas de parto*; gynecological clinics are included in the health center category.

family planning services by the SDP at the time of the survey. The distribution of SDPs by category is presented below.

**Table 1** Distribution of Sample by Region, Level of SDP, and Provision of Family Planning

<b>Region</b>	<b>Level of SDP</b>	<b>% of SDPs offering FP</b>	<b>% of SDPs not offering FP</b>	<b>Total Number of SDPs (N)</b>
<b>Fortaleza</b>	Hospital	36	64	44
	Health Center	39	61	49
	Health Post	38	63	40
	<b>Sub-total</b>	<b>38</b>	<b>62</b>	<b>133</b>
<b>Interior</b>	Hospital	18	82	50
	Health Center	56	44	25
	Health Post	28	72	60
	<b>Sub-total</b>	<b>30</b>	<b>70</b>	<b>135</b>
<b>Ceará</b>	<b>Total</b>	<b>34</b>	<b>66</b>	<b>268</b>

In 1993, only one-third of SDPs reported that they provided family planning (FP) services of any type. In Fortaleza, there is little variation in the percentage of facilities providing family planning services by SDP level; in contrast, significant variation by level of SDP is evident in the interior where only 18% of hospitals reported offering FP compared with over half of all health centers. At least part of this difference is explained by the fact that hospitals specialize in providing more complex, curative services while health centers routinely provide general ambulatory care, including preventive services such as family planning. Health posts should also be front-line providers of family planning services, although less than one-third were providing services in the interior.

### ***Components of Family Planning Service Delivery***

An SDP's ability to provide family planning services depends on the availability of the following components: trained personnel, contraceptive stocks, essential equipment, and consumable supplies. In the following sections, the ability of SDPs to deliver FP services in the state of Ceará will be analyzed according to the availability of the human and material resources required for providing the contraceptive methods that are

theoretically available.<sup>4</sup> Composite indicators of overall family planning program readiness, combining the relevant items from each category, will also be presented. The following table displays the items considered necessary for the safe delivery of each method.

**Table 2** Human and Materials Resources Required for Providing Contraceptives

<b>Method</b>	<b>Condom / Spermicide</b>	<b>Pill</b>	<b>Diaphragm</b>	<b>IUD</b>	<b>Tubal Ligation<sup>5</sup></b>
<b>Personnel</b>	MD or nurse	MD or nurse	obstetrician or gynecologist	obstetrician or gynecologist	obstetrician or gynecologist
<b>Equipment</b>	_____	blood pressure gauge, stethoscope, adult scale	gyn exam table, speculum, sterilization equipment	gyn exam table, speculum, tenaculum, scissors, sterilization equipment	surgery/ delivery room, gyn exam table, lamp/hand light, speculum, tenaculum, scissors, sterilization equip.
<b>Consumable Supplies</b>	condoms / spermicides	Pills	diaphragm, gloves	IUD, gloves	gloves, syringe, needle

### ***A. Family Planning Providers***

The health care personnel considered to be adequately trained to provide family planning services were obstetricians or gynecologists, general practitioners, and nurses, depending on the method in question. Table 3 displays the distribution of SDPs with at least one of the four types of personnel on staff providing reproductive health services at the time of the survey.

<sup>4</sup> Injectable contraceptives have been excluded from analysis as they were not approved by Brazilian health authorities at the time of the study.

<sup>5</sup> Several additional items are required to perform tubal ligation for which information was unavailable (including catgut, suture needles, uterine elevator, separators & retractors, scalpel, tubal hook, antiseptic solution, and anesthesia). However, less than half of all hospitals had even the abbreviated list of required items on hand at the time of the survey.

**Table 3** % of SDPs with an Obstetrician/Gynecologist, General Practitioner, or Nurse

<b>Region</b>	<b>Level of SDP</b>	<b>SDPs offering FP</b>	<b>SDPs not offering FP</b>	<b>All SDPs % (N)</b>
<b>Fortaleza</b>	Hospital	100	93	95
	Health Center	100	97	98
	Health Post	100	96	98
	<b>Sub-total</b>	<b>100</b>	<b>95</b>	<b>97 (127)</b>
<b>Interior</b>	Hospital	100	83	86
	Health Center	93	100	96
	Health Post	94	70	77
	<b>Sub-total</b>	<b>95</b>	<b>79</b>	<b>84 (113)</b>
<b>Ceará (N=266)</b>	<b>Total</b>	<b>98</b>	<b>87</b>	<b>90 (240)</b>

Although SDPs offering family planning in both Fortaleza and the interior were more likely to have one or more professionals on staff than SDPs not offering family planning, the difference between the two groups is relatively small (98 versus 87%). Considering the presence of obstetricians and/or gynecologists in isolation reveals a heavy concentration of these specialists in the urban area of Fortaleza where 66% of all SDPs had an ob/gyn available, compared with only 19% of SDPs in the interior. SDPs offering family planning were also more likely to have an ob/gyn available (53%) than those which did not offer family planning (37%). Overall, less than half of all SDPs (42%) had an obstetrician or gynecologist on staff, a limiting factor in the provision of diaphragms, IUDs, and contraceptive sterilization.

### ***B. Availability of Contraceptive Supplies***

As is evident in tables 4 and 5, a lack of contraceptive supplies severely limited the availability of family planning services. Even when the analysis is restricted to those SDPs reportedly offering family planning services (table 5), the only method available in at least half of these facilities was the pill, and less than one-fifth had all methods in stock.

**Table 4** % of All SDPs with Contraceptives in Stock at Time of Survey

Level of SDP	Pills	Condoms	Diaphragms	Spermicides	IUDs	All methods
Hospital	15	13	9	13	13	5
Health Center	28	24	18	26	22	7
Health Post	22	13	6	10	—	5
<b>Total (N=267)</b>	21	16	16	15	12	6

**Table 5** % of SDPs Offering FP with Contraceptives in Stock at Time of Survey

Level of SDP	Pills	Condoms	Diaphragms	Spermicides	IUDs	All methods
Hospital	58	50	29	46	46	21
Health Center	61	55	39	58	49	15
Health Post	66	41	19	31	—	16
<b>Total (N=89)</b>	62	48	29	45	36	17

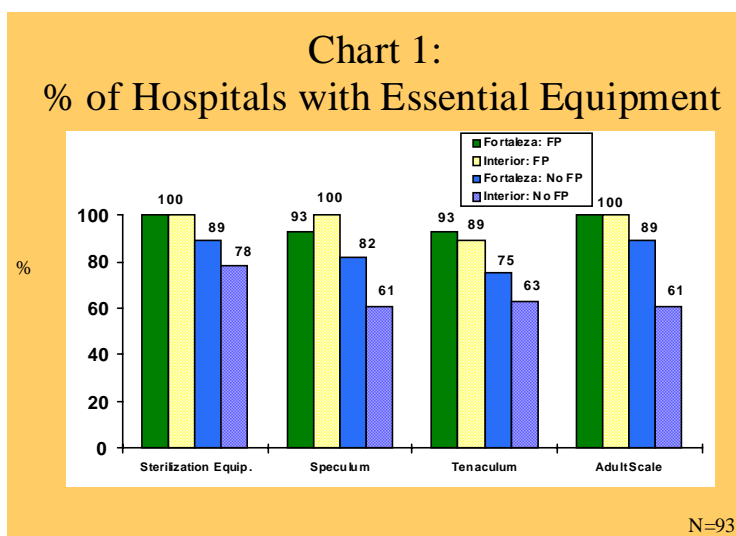
Differences in contraceptive stocks by level of SDP are relatively small, with hospitals having the largest number of methods in stock followed closely by posts and centers (table 5). Without exception, SDPs in Fortaleza were better stocked than SDPs in the interior, the difference being greatest with respect to condoms (65% of SDPs in Fortaleza with stocks compared to only 28% of SDPs in the interior) and spermicides (55% and 33% respectively) (not shown).

### *C. Availability of Equipment and Consumable Supplies*

The availability of the following nine items, considered to be essential equipment for the delivery of various contraceptives, were evaluated for each level of SDP in Fortaleza and the interior: gynecological exam table, sterilization equipment, lamp or hand-held light, speculum, tenaculum, scissors, blood pressure gauge, stethoscope, and an adult scale.

Irrespective of whether family planning services were offered, the large majority of hospitals (85% or more) in both Fortaleza and the interior had the following five items: gynecological exam table, lamp/hand light, blood pressure gauge, stethoscope, and scissors.

Hospitals offering FP services were more likely to have the remaining four items than non-FP hospitals (chart 1). For example, all hospitals offering family planning had sterilization equipment available while more than one-fifth of non-FP hospitals in the interior did not. A similar pattern was seen with regard to speculums: over 90% of hospitals offering FP in



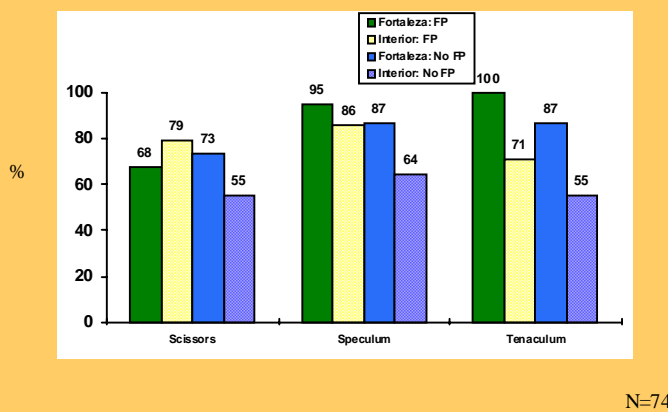
Fortaleza and the interior had speculums, compared with 82% of non-FP hospitals in Fortaleza and only 61% in the interior. Likewise, while the availability of tenaculums was not a significant limiting factor among hospitals offering FP, only 68% of non-FP hospitals (75% in Fortaleza and 63% in the

interior) had the instrument available. Finally, all hospitals offering FP had an adult scale, compared to only 61% of non-FP hospitals in the interior.

All health centers surveyed had a blood pressure gauge available and 85% or more had a stethoscope, sterilization equipment, a lamp/hand-held light, and an adult scale. Gynecological exams tables were also available in the large majority of health centers, from a low of 82% among non-FP health centers in the interior to a high of 95% among centers offering FP in Fortaleza. For centers as a whole, the equipment in shortest supply was scissors (absent in 30% of centers), followed by speculums and tenaculums (absent in approximately 20% of centers). As was seen in the case of hospitals, health centers offering

family planning in Fortaleza were the most likely to have resources available while the greatest scarcity was seen among health centers not offering family planning in the interior.

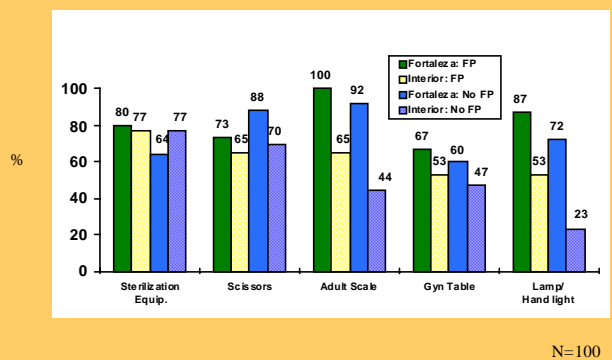
Chart 2:  
% of Health Centers with Essential Equipment



better equipped than those in the interior.

The availability of certain consumable supplies, such as gloves, syringes, and needles, was not a limiting factor for hospitals (85% or more had supplies on hand at the time of the survey). With respect to health centers, gloves were widely available in Fortaleza (94%), but absent in approximately one-fifth of all centers in the interior, with little variation by FP service availability. The difference between regions was even greater in the case of health posts: 90% of posts in Fortaleza had stocks of gloves compared with only 52% in the interior.

Chart 3:  
% of Health Posts with Essential Equipment



In order to assess the readiness of SDPs to perform gynecological exams, three additional items were considered: stock of wooden spatulas, slides, and acetic acid or Lugol's solution (to detect pre-cancerous cell changes of the cervix). As displayed in table 6, health centers in both Fortaleza and the interior were better stocked than hospitals with respect to each of the three items. There were also significant differences by region: just

over half of all SDPs had all three items in stock in Fortaleza compared with less than one-third of SDPs in the interior.<sup>6</sup>

**Table 6** % of SDPs with Materials for Gynecological Exam in Stock at Time of Survey

<b>Region</b>	<b>Level of SDP</b>	<b>Spatula</b>	<b>Slides</b>	<b>Acetic Acid/ Lugol's</b>	<b>All 3 Items Available</b>
<b>Fortaleza</b>	Hospital	70	74	66	56
	Health Center	90	84	84	71
	Health Post	65	53	35	23
	<b>Sub-total</b>	<b>76</b>	<b>71</b>	<b>63</b>	<b>52</b>
<b>Interior</b>	Hospital	54	42	40	30
	Health Center	60	64	56	48
	Health Post	27	20	22	17
	<b>Sub-total</b>	<b>43</b>	<b>36</b>	<b>35</b>	<b>27</b>
<b>Ceará (N=267)</b>	<b>All Levels</b>	<b>59</b>	<b>54</b>	<b>49</b>	<b>39</b>

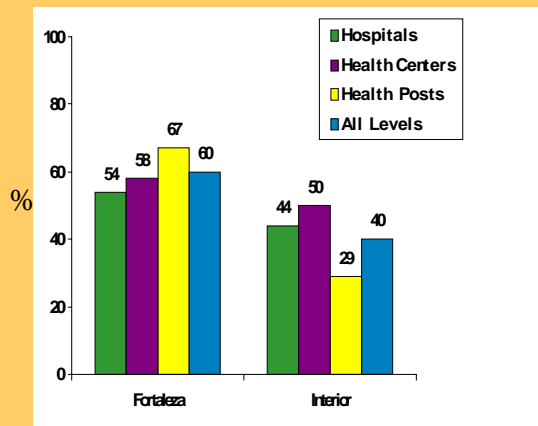
### *Family Planning Preparation*

Bringing together all human and material resources required for the safe delivery of a contraceptive method provides a more realistic picture of the ability of SDPs to provide FP services than simply considering method stocks. Chart 4a shows the distribution of SDPs offering FP services that were adequately prepared to deliver oral contraceptives in 1993, by SDP level and region; chart 4b displays the same data for all SDPs in Ceará, including those SDPs that were not offering FP at the time of the survey.<sup>7</sup>

<sup>6</sup>A higher percentage of SDPs offering FP had each of the three items in stock than those not offering FP, as was seen with respect to contraceptive stocks and most essential equipment.

<sup>7</sup> Although not shown separately, only 1% of non-FP SDPs were prepared to offer oral contraceptives, none were prepared to offer condoms, and less than one percent were prepared to offer diaphragms or IUDs.

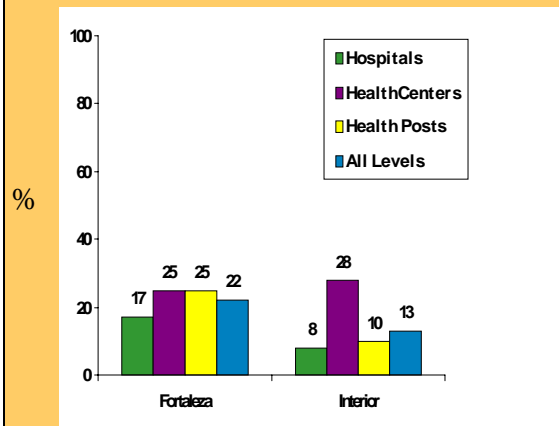
**Chart 4a:**  
**% of FP SDPs Prepared to Deliver Oral Contraceptives**



Preparation=FP Provider (Ob/Gyn, General Practitioner or Nurse), OC stock, BP gauge, stethoscope, and scale

N=87

**Chart 4b:**  
**% of All SDPs Prepared to Deliver Oral Contraceptives**



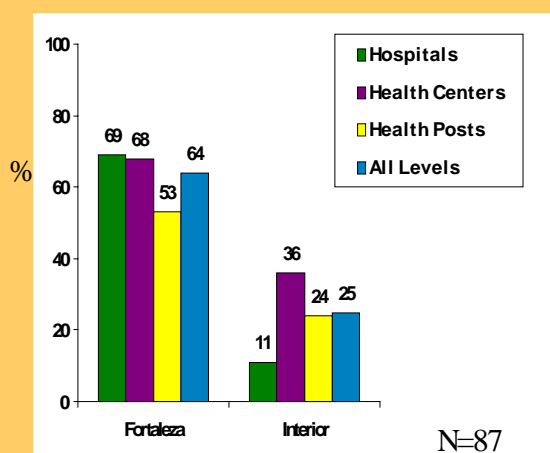
Preparation=FP Provider (Ob/Gyn, General Practitioner or Nurse), OC stock, BP gauge, stethoscope, and scale

N=265

The majority of SDPs providing FP in Fortaleza were adequately prepared to deliver condoms, in contrast to only 25% of SDPs providing family planning in the interior (chart 5a). Overall, only 15% of SDPs in Ceará had a stock of condoms on hand, together with an MD or nurse (chart 5b).

Chart 5a

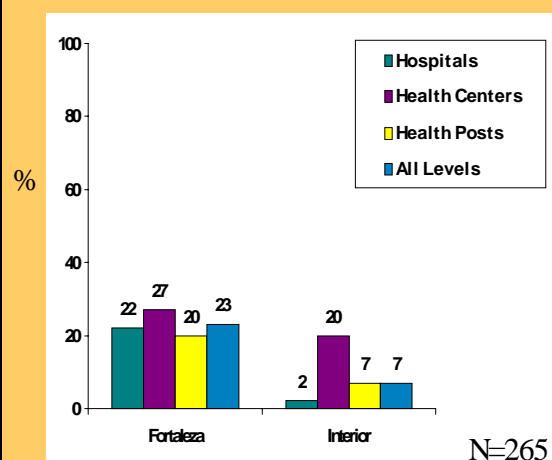
### % of FP SDPs Prepared to Deliver Condoms



Preparation=FP Provider (Ob/Gyn, General Practitioner or Nurse), and stock of condoms

Chart 5b

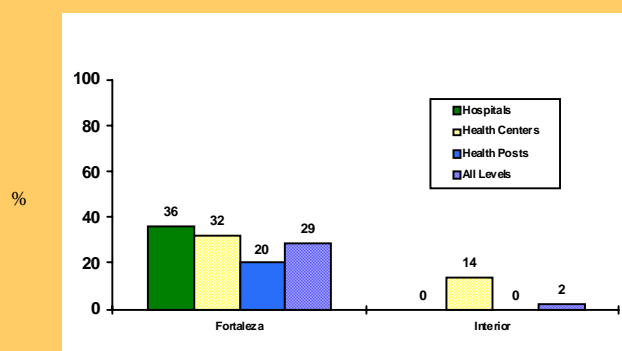
### % of All SDRs Prepared to Deliver Condoms



Preparation=FP Provider (Ob/Gyn, General Practitioner or Nurse), and stock of condoms

Chart 6:

### % of FP SDPs Prepared to Deliver Diaphragms

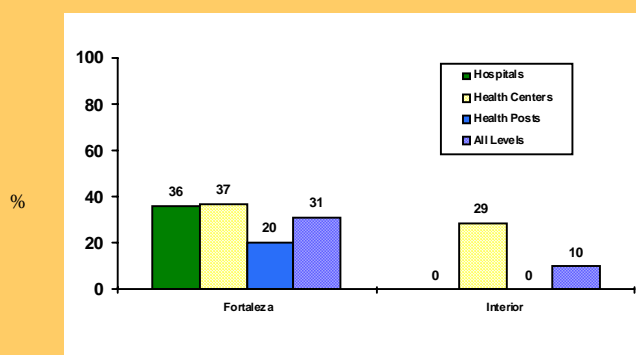


Preparation= Ob/Gyn, stock of diaphragms & spermicide, gyn table, speculum, gloves, and sterilization equipment.

Only 18% of SDPs offering FP in Ceará were prepared to deliver the diaphragm in 1993, virtually all of which were concentrated in Fortaleza (chart 6). When all SDPs are considered irrespective of FP status, this figure declines to 6% (12% in Fortaleza and 2% in the interior). The situation was only slightly better with respect to the IUD: just under one-third of SDPs

offering FP in Fortaleza were prepared to deliver the method, as were 10% of SDPs offering FP in the interior (chart 7). Overall, only 8% of SDPs in Ceará were prepared to deliver the IUD (14% in Fortaleza

**Chart 7:**  
**% of FP SDPs Prepared to Deliver IUDs**

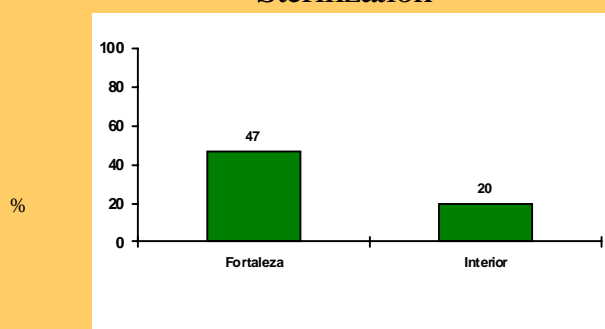


Preparation= Ob/Gyn, IUD, gyn table, speculum, tenaculum, scissors, gloves, and sterilization equipment. N=88

and 3% in the interior) (not shown).

Finally, of the 93 hospitals surveyed in Ceará, less than half (41%) could meet even the limited human and material requirements considered essential for providing female sterilization (chart 8).

**Chart 8:**  
**% of Hospitals Prepared to Perform Female Sterilization**



Preparation= Ob/Gyn, surgery/delivery room, gyn table, lamp/ hand light, speculum, tenaculum, scissors, gloves, needle, syringe, and sterilization equipment. N=93

The extremely limited ability of health care facilities to provide family planning services in 1993 may be summed up by two global indicators: the percentage of all SDPs with stocks of all appropriate methods<sup>8</sup> on hand at the time of the survey, and the percentage of SDPs fully prepared to deliver all appropriate methods.

With regard to contraceptive stocks, only 6% of SDPs in Ceará had all methods on hand, and only 3% were prepared to provide all methods appropriate for their level of service delivery.<sup>9</sup>

<sup>8</sup> According to unofficial norms of Ceará's health secretariat, hospitals and health centers may be expected to provide all reversible forms of contraception, while health posts are expected to provide all such methods with the exception of the IUD. As stated above, female sterilization is not officially recognized as a method of family planning and is only performed in hospitals, typically following a cesarean delivery. Thus, it was not included in the global indicator of total SDP preparation to deliver family planning.

### **Quality of Care Considerations**

In addition to the minimum items required for the safe delivery of contraceptive methods, four other areas were evaluated due to their impact (or potential impact) on service quality, which were: IEC activities and service accessibility; performance of logistics management tasks and frequency of contraceptive stockouts; supervision of SDPs by appropriate authorities; and adequacy of SDPs physical infrastructure.

#### ***IEC and Service Accessibility***

Over half of all SDPs offering FP had contraceptive pamphlets and/or flip charts available at the time of the survey, with little variation by region. SDP directors were also asked whether on-site educational sessions were regularly held for waiting clients. While just over half of all SDPs in Fortaleza reported holding on-site educational sessions, less than a third of SDPs in the interior did so. When these two elements are combined as an indicator of overall IEC activity, both regions score poorly.

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<sup>9</sup> When the diaphragm is excluded from both indicators, the percentage of SDPs with all stocks on hand rises to 9 and the percentage of SDPs fully prepared to deliver all appropriate methods rises to 6.

**Table 7** % of FP SDPs with IEC Materials in Stock & Conducting Educational Sessions

<b>Region</b>	<b>Level of SDP</b>	<b>Pamphlets/ Flip Charts in stock</b>	<b>Educational Sessions Held On-Site</b>	<b>Pamphlets/Flip Charts in Stock &amp; Info Sessions Held</b>
<b>Fortaleza</b>	Hospital	69	56	50
	Health Center	58	42	26
	Health Post	40	60	33
	<b>Sub-total</b>	<b>56</b>	<b>52</b>	<b>36</b>
<b>Interior</b>	Hospital	33	0	0
	Health Center	79	36	36
	Health Post	59	35	29
	<b>Sub-total</b>	<b>60</b>	<b>28</b>	<b>25</b>
<b>Ceará (N=90)</b>	<b>Total</b>	<b>58</b>	<b>41</b>	<b>31</b>

As expected, figures fall even further when all 268 SDPs are considered, as seen in the following table.

**Table 8** % of SDPs with IEC Materials in Stock & Conducting Educational Sessions

<b>Region</b>	<b>Level of SDP</b>	<b>Pamphlets/ Flip Charts in stock</b>	<b>Educational Sessions Held On-Site</b>	<b>Pamphlets/Flip Charts in Stock &amp; Info Sessions Held</b>
<b>Fortaleza</b>	Hospital	46	34	25
	Health Center	29	33	10
	Health Post	45	50	33
	<b>Sub-total</b>	<b>39</b>	<b>38</b>	<b>22</b>
<b>Interior</b>	Hospital	12	16	2
	Health Center	60	40	24
	Health Post	25	20	13
	<b>Sub-total</b>	<b>27</b>	<b>22</b>	<b>11</b>
<b>Ceará (N=268)</b>	<b>Total</b>	<b>30</b>	<b>33</b>	<b>16</b>

Among SDPs that offered FP, service accessibility was evaluated by the number of days per week services were available and the presence of a sign or poster indicating that

FP services were offered. Again, few SDPs in either region appeared to be making an effort to render their services accessible: only 27% of SDPs in Fortaleza and 20% in the interior had a sign indicating service availability and offered FP services at least 2.5 days per week.

### ***Logistics Management and Contraceptive Stockouts***

Whether an SDP had the minimum components of a logistics systems was judged by three criteria: stocking of clinic supplies according to date of expiration;<sup>10</sup> protecting supplies against direct sunlight and rain; and use of a stock balance sheet. The majority of SDPs met these requirements (67%), with the highest proportions found among SDPs in Fortaleza and among those offering FP services.

**Table 9** % of SDPs with Basic Components of Logistics System

<b>Region</b>	<b>Level of SDP</b>	<b>SDPs Offering FP</b>	<b>SDPs not Offering FP</b>	<b>All SDPs (%)</b>
<b>Fortaleza</b>	Hospital	69	71	71
	Health Center	95	77	84
	Health Post	87	64	73
	<b>Sub-total</b>	<b>84</b>	<b>71</b>	<b>76</b>
<b>Interior</b>	Hospital	89	66	70
	Health Center	71	64	68
	Health Post	71	33	43
	<b>Sub-total</b>	<b>75</b>	<b>51</b>	<b>58</b>
<b>Ceará (N=268)</b>	<b>Total</b>	<b>80</b>	<b>60</b>	<b>67</b>

However, even SDPs that met these requirements did not necessarily have an adequate logistics system in place. Of those SDPs offering FP, the large majority reported contraceptive stockouts in the two months prior to the survey: 65% of SDPs had run out of pills and/or condoms, 75% had run out of diaphragms and/or spermicides, and 64% had been stocked out of IUDs.

<sup>10</sup> For SDPs offering family planning, clinic stocks refer to both contraceptives and antibiotics. For SDPs not offering family planning, stocks refer only to antibiotics.

### *Supervisory Visits*

The majority of SDPs in Ceará had received a supervisory visit related to reproductive health services in the three months prior to the survey. The quality, and thus utility, of these supervisory visits was deemed sufficient if the supervisor completed at least three of the following activities: observation of service delivery; review of SDP record-keeping; inquiry regarding current problems; suggestion of solutions or alternatives; and positive feedback given for work well done. In total, only 16% of all SDP supervisory visits consisted of at least three of these activities. As displayed in table 10, the quality of supervisory visits was higher for SDPs of all levels in Fortaleza (where 23% of SDPs had adequate supervisory visits), as well as among those SDPs offering FP services (21%).

**Table 10** % of SDPs Receiving Adequate Supervision

<b>Region</b>	<b>Level of SDP</b>	<b>SDPs Offering FP</b>	<b>SDPs not Offering FP</b>	<b>All SDPs (%)</b>
<b>Fortaleza</b>	Hospital	19	21	21
	Health Center	32	13	20
	Health Post	27	32	30
	<b>Sub-total</b>	<b>26</b>	<b>22</b>	<b>23</b>
<b>Interior</b>	Hospital	0	7	6
	Health Center	21	0	12
	Health Post	18	5	8
	<b>Sub-total</b>	<b>15</b>	<b>5</b>	<b>8</b>
<b>Ceará (N=268)</b>	<b>Total</b>	<b>21</b>	<b>13</b>	<b>16</b>

### ***Physical Infrastructure***

SDPs were also evaluated on the quality of their infrastructure, which was judged to be adequate if all of the following elements were present: private, clean exam rooms with running water; waiting area protected against sun and rain and with a sufficient number of chairs; and a rest room available for clients. Less than half of all SDPs offering FP services in either region, and only one-third of those not offering FP, met these requirements. Overall, only 37% of SDPs in Ceará were judged to have adequate physical infrastructure.

**Table 11** % of SDPs with Adequate Physical Infrastructure

<b>Region</b>	<b>Level of SDP</b>	<b>SDPs Offering FP</b>	<b>SDPs not Offering FP</b>	<b>All SDPs (%)</b>
<b>Fortaleza</b>	Hospital	25	33	30
	Health Center	58	52	54
	Health Post	57	16	31
	<b>Sub-total</b>	<b>47</b>	<b>35</b>	<b>39</b>
<b>Interior</b>	Hospital	67	49	52
	Health Center	57	27	44
	Health Post	18	18	18
	<b>Sub-total</b>	<b>43</b>	<b>33</b>	<b>36</b>
<b>Ceará (N=262)</b>	<b>Total</b>	<b>45</b>	<b>34</b>	<b>37</b>

## **V. Results: Interviews and Observations**

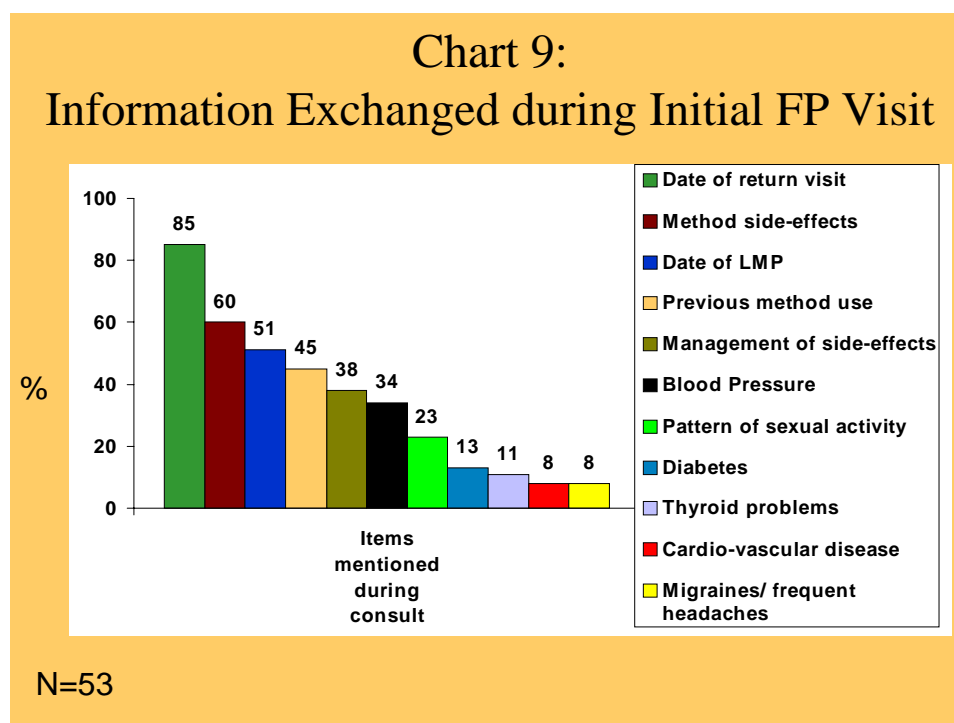
### ***Provider Training***

In addition to the inventory module implemented at each SDP, 168 reproductive health providers were interviewed, including doctors (60%), nurses (31%), and health technicians (11%). Sixty-five percent of those interviewed were from the Fortaleza metropolitan area, reflecting the higher concentration of reproductive health services in urban areas. Of all reproductive health services, pre-natal care was the most widely provided among those interviewed (82%), followed by gynecological services (70%) and family planning (61%). Just over half of providers (52%) reported performing any type of STD screening or treatment.

When asked to name those areas in which they felt they had received adequate training, 83% of providers mentioned pre-natal care, 67% mentioned gynecological services, and only 51% mentioned family planning. Less than half of all providers interviewed (45%) felt they had received adequate training in STD services.

### *Observations of Service Delivery*

The providers interviewed were also observed delivering reproductive health services. A total of 138 family planning consults were observed, of which 53 (38%) were with women wanting to initiate contraceptive use or who were seeking a new method. The following chart displays the distribution of these “initial” family planning visits by content of the provider-client information exchange.

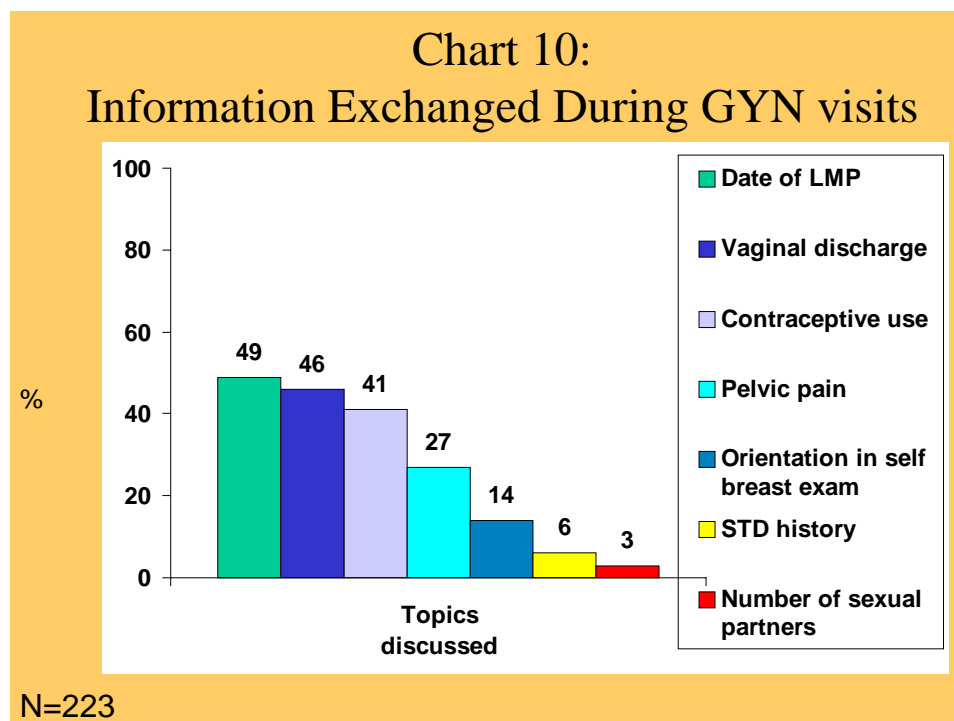


Only a small minority of providers asked their clients about health conditions that might contra-indicate the use of hormonal methods and in less than one quarter of first time family planning visits was the client’s sexual activity discussed. Potential side-effects of the method selected was one of the most frequently mentioned issues, but was still absent in 40% of the visits observed.

When pre-natal care providers were asked about the information they considered essential to be given to clients, the only subject mentioned by a majority of those

interviewed was nutrition (82%); other topics included breastfeeding (46%), use of medications during pregnancy (42%), and danger signs (29%). However, when actually observed attending women who had come for their first pre-natal visit (N=107), only 36% of providers discussed nutrition, 23% discussed the use of medications, and a mere 6% alerted their clients to potential danger signs during pregnancy.

A total of 223 gynecological visits were observed, just over half of which were preventative in nature (pap smears and/or breast exams). The following chart indicates that providers solicit very little information from clients regarding any current symptoms of a possible STD, such as vaginal discharge or pelvic pain, or high risk sexual behavior.



The fact that providers asked clients about contraceptive use during less than half of all gynecological visits observed also represents a missed opportunity for assessing family planning needs. And finally, during only 14% of gynecological visits were clients instructed how to perform a self breast exam.

The poverty of information exchanged between providers and clients during reproductive health visits is partially explained by their short duration. Of all visits observed, fully one-third lasted five minutes or less (ranging from 25% of pre-natal visits to 43% of family planning visits). Minimal interaction between providers and clients, coupled

with the fact that over 60% of clients waited more than two hours to be seen, indicate important deficiencies in both the accessibility and quality of reproductive health services.

## **VI. Conclusions**

The results of the 1993 Situation Analysis of Reproductive Health Resources in the state of Ceará clearly demonstrate the low priority given to family planning by the state government in the early 1990s. Disaggregating data by region and by the provision of family planning services demonstrates that resource scarcity was greatest among SDPs in the interior and among those SDPs which were not offering FP services at the time of the survey. The latter finding most likely reflects a natural, positive relationship between resources and services: better equipped facilities tend to offer a wider range of services than those with fewer resources. Overall, study results confirm that FP services were largely unavailable in the public sector.

Problems with service accessibility and quality were not limited to the area of family planning. Although pre-natal and gynecological services were more widely available than family planning, they were far from universal. And important shortcomings in the content and quality of pre-natal and gynecological visits indicate that all three types of reproductive health services had much room for improvement.

Since 1993, numerous interventions have been carried out in Ceará aimed at increasing the availability and quality of FP and other reproductive health services in the public sector. A second round of Situation Analysis, initiated in September of 1997, will measure the cumulative impact of these activities. While the 1993 SA uncovered deficiencies in most areas, from contraceptive stockouts and equipment deficits to limited interaction between providers and clients and poor SDP supervision, it is anticipated that the 1997 SA will find improvements in most areas as well as highlight the remaining areas of greatest need.